

ABSTRACT OF THE DISCLOSURE

Dielectric barrier discharge lamp and the use of this lamp for viewing X-rays

The invention proposes a dielectric barrier discharge lamp having a phosphor mixture and the use of a dielectric barrier discharge lamp with a color temperature of at least 10,000 K for viewing X-rays. The phosphor mixture consists of the phosphor components R: europium-activated yttrium gadolinium borate ($[Y, Gd]BO_3:Eu$), G: terbium-activated lanthanum phosphate ($LaPO_4:[Tb]$) or cerium- and terbium-activated lanthanum phosphate ($LaPO_4:[Ce, Tb]$) and B: europium-activated barium magnesium aluminate ($BaMgAl_{10}O_{17}:Eu$). The following applies to the proportions by weight in the mixture: $0.05 \leq R \leq 0.15$, $0.50 \leq G \leq 0.70$, $0.20 \leq B \leq 0.40$ and $R+G+B=1$. Fig. 1a